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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,772	07/21/2003	Marc Rohrschneider	740116-490	4231

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MCLEAN, VA 22102-8064

EXAMINER

KIM, CHRISTOPHER S

ART UNIT	PAPER NUMBER
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3752

MAIL DATE	DELIVERY MODE
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07/26/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/622,772

Applicant(s)

ROHRSCHEIDER, MARC

Examiner

Christopher S. Kim

Art Unit

3752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) 7, 9-11, 15, 20-22, 27, 28, 38 and 40-42 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8, 12-14, 16-19, 23-26, 29-37, 39 and 43-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. The response filed July 14, 2006 is acknowledged.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Election/Restrictions

3. Claims 7, 9-11, 15, 20-22, 27, 28, 38 and 40-42 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on May 4, 2005.

Claim Objections

4. Claims 36-45 are objected to because of the following informalities: the preamble of the claims is inconsistent with that of the parent claim 35. Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. Claims 35-37, 39 and 43-46 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The preamble of claim 35 recites "an actuator" but the body of the claim recites "...and the other of the piston and cylinder being a separate element from the actuator..." It appears that claim 35 requires both a "cylinder" and a "piston." The preamble defines a subcombination of an actuator, but the body of the claim defines a combination of an actuator and a piston or cylinder.

The preamble of claim 35 recites "an actuator" which appears to be a subcombination of the "finger operated spray pump" of claim 1. It is uncertain whether it is applicant's intent to claim merely the subcombination in claim 35. If applicant maintains the scope of claim 35 in his response to this Office action, claim 35 and its dependent claims will be withdrawn from further consideration as not being readable on the elected invention (election by original presentation) because the combination does not require the particulars of the subcombination (i.e., the one way valve means) and has separate utility (i.e., a spray nozzle).

Claim Rejections - 35 USC § 103

6. Claims 1-6, 8, 12-14, 16-19, 24, 25, 29-37, 39 and 43-46 (as best understood) are rejected under 35 U.S.C. 103(a) as being unpatentable over Aftergut (1,517,932).

Aftergut discloses, in figure 1, a finger operated spray pump comprising:

a liquid reservoir 1;

an actuator which is a finger operated actuator having:

an atomizer 14;

a cylinder 5, 6;

- a piston 3;
- a one way valve means 9;
- a passageway means 7, 12;
- a dip tube 8;
- a second one way valve means 15.

Specifically regarding claims 1, 30, 31, 32, 35, 45 and 46:

Aftergut does not specifically disclose the diameter of the cylinder or the diameter of the nozzle, but Aftergut recognizes, on page 1, lines 94-100, the desirability of adapting the invention to bottles of different sizes.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided a piston and cylinder diameter between 0.5 mm and 4.0 mm to accommodate smaller/larger bottles, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided a nozzle diameter between 15 μ m and 150 μ m to accommodate smaller/larger bottles, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Specifically regarding claims 2, 3 and 36:

Aftergut does not specifically disclose the stroke length.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided a stroke length between 2 mm and 30 mm to accommodate smaller/larger bottles, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Specifically regarding claims 4-6, 33, 34 and 37:

It has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138.

Specifically regarding claims 12, 13, 43 and 44:

Aftergut does not specifically disclose the piston internal diameter.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided a stroke length between 0.2 mm and 3.0 mm to accommodate smaller/larger bottles, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Specifically regarding claims 14 and 16-18:

Aftergut does not specifically disclose metal, aluminum and pressure resistant plastic. Metal, aluminum and plastics are well known materials in the art. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have made the device of Aftergut from metal, aluminum or pressure resistant plastic for durability.

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All piston/passageway means possess some degree of capillary property.

Specifically regarding claim 29:

Aftergut does not disclose a return spring in the embodiment of figure 1 but does disclose a spring 23 in the embodiment of figure 2.

It would have been obvious to a person having ordinary skill in the art at the time of the invention to have provided a return spring in Aftergut's embodiment of figure 1 to automatically return the actuator to the upper position (page 2, lines 16-18).

7. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aftergut (1,517,932) in view of Nozawa et al. (4,530,449).

Aftergut discloses the limitations of the claimed invention with the exception of the filter. Nozawa discloses a filter 48 between nozzle outlet 44 and second valve 36. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have provided the filter of Nozawa to the device of Aftergut to prevent solids from reaching the nozzle outlet (Nozawa, column 4, lines 50-54).

8. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aftergut (1,517,932) in view of Corsette (4,050,613).

Aftergut discloses the limitations of the claimed invention with the exception of the air vent means. Corsette discloses an air vent means 17. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have provided the air vent means of Corsette to the device of Aftergut to permit equalization of pressures (Corsette, column 3, lines 24-25).

Response to Arguments

9. Applicant's arguments filed July 14, 2006 have been fully considered but they are not persuasive. In response of applicant's argument directed to discovering the optimum range, the size of the cylinder/piston and the nozzle diameter are features one of ordinary skill in the art would recognize as affecting spray quantity, size and pattern in addition to the overall size of the apparatus. One of ordinary skill in the art would size Aftergut as claimed to control the spray quantity, size and pattern or to adjust the overall size of the device, i.e., to produce a smaller or larger apparatus

Conclusion

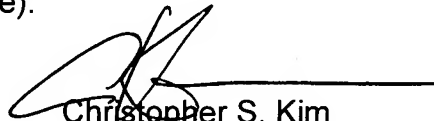
10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher S. Kim whose telephone number is (571) 272-4905. The examiner can normally be reached on Monday - Friday, 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Christopher S. Kim
Primary Examiner
Art Unit 3752

CK